GEOGRAPHIC NEWS BULLETINS

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(The National Geographic Society is a scientific and educational Society, wholly altruistic, incorporated as a non-commercial institution for the increase of geographic knowledge and its popular diffusion. General Headquarters, Washington, D. C.)

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NOTE TO TEACHERS.—Because so many schools and public libraries preserve copies of the GEOGRAPHIC NEWS BULLETINS for future reference, a subject index is supplied annually, listing both bulletins and pictures. The INDEX to Volume XVI, contained in this issue, covers the 30 issues from February 15, 1937, through the current number.

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HERE THE NATIONAL GEOGRAPHIC SOCIETY OBSERVES ITS GOLDEN ANNIVERSARY

In 1888 The Society was founded by a small group of scientists in the nation's capital who recognized a need for an exchange of timely geographic information. Today it has more than a million members in all parts of the world and maintains headquarters in this stately building on 16th Street. At the right is Hubbard Memorial Hall, housing The Society's research library. In the larger building are The Society's executive and editorial offices and Explorers' Hall, an art gallery of staff photographers' achievements and museum of explorers' relics and trophies. The third floor contains a collection, in fireproof cases, of 250,000 photographs in black and white and natural color from all over the world. An additional building, occupying a whole block in another section of the city, takes care of membership records and the mailing of The Society's Magazine, maps, and other publications to its members (Bulletin No. 1).

HOW TEACHERS MAY OBTAIN THE BULLETINS

The Geographic News Bulletins are published weekly throughout the school year (thirty issues) and will be mailed to teachers in the United States and its possessions for one year upon receipt of 25 cents (stamps or money order); in Canada, 50 cents. Entered as second-class matter, Jan. 27, 1922, at the Post Office, Washington, D. C., under act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in section 1103, Act of Oct. 3, 1917, authorized Feb. 9, 1922. Copyright 1938 by the National Geographic Society.

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General Headquarters, Washington, D. C.

National Geographic Society 50 Years Old

AT THE northeast corner of historic Lafayette Square, overlooking the White House grounds and the Veterans Administration, is a series of unimposing structures of different ages and styles of architecture. Not many visitors to Washington give them more than a passing glance. Yet they house the quarters of the Cosmos Club, one of the most famous organizations of its kind in the world. Chief qualification for membership in the club is that the applicant shall have distinguished himself in art, letters or science, or in public service.

Here, on the evenings of January 13 and January 20, 1888, a small group of thoughtful, serious-minded men met to organize a society for the increase and diffusion of geographic knowledge. Seven days later, January 27, as a result of their discussions, the National Geographic Society was incorporated, with a total membership of 165 Washington scientists. Gardiner G. Hubbard was elected President.

Now Has More Than a Million Members

This year The Society, which has grown to a world-wide organization of more than a million members, is observing its golden anniversary at its headquarters on 16th Street (see illustration, cover), four blocks from its Cosmos Club birthplace.

The National Geographic Society is today the largest scientific and educational institution in the world. In the past, science has had to look to wealthy patrons to find the funds necessary to carry on its work. But the National Geographic Society has made it possible for everyone interested in matters geographic and the world we inhabit to have a personal and equal share in exploring unknown territory and studying the wonders of Nature.

All the Society's activities—its Magazine, its expeditions, its School Service, and its scientific researches—are sustained by the cooperative efforts of its members, who nominate other eligible persons, and by the small annual membership fees of its 1,100,000 members. The Society has no endowment and it is not dependent upon gifts from outsiders for support. No individual or group derives any financial profit from The Society's income, which is administered by a Board of Trustees of international reputation. All funds are spent for exploration, scientific research, and the diffusion of geographic knowledge in popular form.

Almost unbelievable is the story of the growth in the number of members of the National Geographic Society and the readers of its Magazine. At first there was no Magazine. Members met at intervals, read special papers, and discussed current geographic problems and affairs.

Then, early in 1889, appeared Volume I, No. 1, of the *National Geographic Magazine*. Between its brick-red covers were such technical articles as these: "Geographic Methods in Geologic Investigation"; "The Classification of Geographic Forms by Genesis," etc. It was earnest, serious, studious, thorough, but it bore little relation to the illustrated periodical that it would some day be.

Dr. Alexander Graham Bell Becomes President

Appearing at irregular intervals, the Magazine did not become a monthly publication until January 1, 1896. Two years later, Dr. Alexander Graham Bell, distinguished inventor of the telephone, became President of The Society. A plan to popularize the Magazine and increase the subscriptions had failed, and the youthful Society was badly in debt.

But President Bell was not disheartened. He maintained that geography was an all-inclusive subject and that the public would support a geographic magazine, provided the matter was presented clearly and entertainingly. At that time, January, 1899, The Society had only 1,000 members, 800 of whom lived in Washington. Dr. Bell suggested that, instead of a volunteer editorial committee, a full-time editor be hired, and he agreed to pay his salary for two years.

The position was offered to Gilbert Grosvenor, who was teaching school in New Jersey at the time. Mr. Grosvenor took over his new duties in April, 1899, and from that date to the present has directed The Society's policies. Since 1920 he has been President of The Society.

In the fifty years since its founding the National Geographic Society has sponsored or cooperated in many of the notable explorations and geographic researches of modern times. Its blue, brown, and green flag (representing sky, earth, and sea) has been carried to the highest altitude above the earth (illustration, inside cover) and the greatest sea depth ever reached by man (illustration, next page). It has been taken to both North and South Poles, and into steaming jungles, trackless deserts, and over frozen wastes where men had never been before.

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Photograph by Richard H. Stewart

ALL ABOARD FOR A WORLD'S RECORD ASCENT INTO THE STRATOSPHERE

Among the most ambitious and spectacular explorations sponsored by the National Geographic Society in its fifty years of history were the stratosphere flights from the Stratobowl, near Rapid City, S. D., in 1934 and 1935. Cooperating with the U. S. Army Air Corps, The Society's expedition ascended 72,395 feet (13.71 miles) on November 11, 1935, and the instruments and cameras in the gondola of the huge balloon *Explorer II* brought back a rich cargo of scientific data. Above, the ground crew is attaching the gondola to the enormous helium-inflated bag, which towers 315 feet above the ground (higher than the dome of the U. S. Capitol). It is just before dawn, and because of the zero cold three men are assigned to each of the 36 retaining ropes. A short time later the big balloon was released for eight hours of soaring, coming safely to earth near White Lake, S. D. (Bulletin No. 1).

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Singapore, British Lion on Guard in the Orient

THREE cruisers of the U. S. Navy are steaming into the Orient, bound for a friendly harbor said to be "enemy-proof"—Singapore. They will represent the United States as the only foreign power taking part in the opening of new docks and Great Britain's naval display on February 14.

New docks in Singapore are like new skyscrapers in New York—structures that are symbols as well. For Singapore is a city, an island, a tradition, and a threat. The oval island lies off the southern tip of the Malay peninsula. The white-walled red-roofed city spreads along its south shore. It is the city's 36 square miles of dock-lined harbor that bred the tradition: best port between the China Sea and the Mediterranean, and among the world's leading ten.

Tropical Green Sheathes Singapore's Strength

The threat of Singapore, meant for whoever yearns to fight the British navy, is veiled from sight in mangrove swamps along the shallow strait, cutting Singapore Island from the mainland of Johore. Its naval docks, among the largest ever built, can receive and repair battleships. Its air and naval force nourishes the impression that the end of the Malay peninsula, nosing down into the Netherlands Indies, is a dragon's head, and Singapore furnishes the fangs.

Unlike rocky Gibraltar, or cautiously aloof Malta with a big chip of fortress on its shoulder, Singapore sheathes its strength in a green cloak of banana plants and palm and rubber trees, naturally luxuriant 73 miles above the Equator. (The low oval island gives no hint, at a distance, that it is anything different from the balmy emerald isle set in sapphire southern seas so popular in travel literature.)

Yet its 217 square miles contain the most progressive urban area within a 1,000-mile radius, enough naval strength to lend meaning to Far Eastern diplomacy, and a remnant of jungle heart in which monkeys swing and chatter.

Most important of the four British possessions comprising the Crown Colony of the Straits Settlements, Singapore is their capital. Because of its strategic location at the unavoidable gateway of Oriental traffic east of India, it is capital also of nearly half the world's trade routes. Because it is a free port, ships from every continent discharge cargoes into its warehouses for storage until transshipment.

Via Singapore, Machine Age Is Transplanted to Orient

Exotic wares cross the docks: Indian shark fins destined for Chinese palates, Egyptian pickles for Sumatra, coriander seeds from Morocco on the way to Java. Australia ships meat and wool and flour. Canada and the United States send automobiles, machinery, and canned goods. Cloves and coffee come from Africa, rice and silk from China, matches and cotton goods from Japan, hemp and hardwoods from the Philippines, and rubber, oil, and spices from the Netherlands Indies, and the supplies from Europe for transplanting the home civilization into the Eastern tropics are unloaded on the docks of Singapore, the "Emporium of the Orient."

In addition to playing landlord for international trade, Singapore minds also its own businesses (illustration, next page). Pineapples are canned, soap is made from coconut oil, rubber is smoked and graded for shipping. The city is headquarters for the world's largest tin-smelting company. In a sample year, 1931, 42 per cent of the world's output of rubber and 20 per cent of the tin were dispatched over the docks of this port.

Note: Additional photographs and descriptions of Singapore will be found in "Fire-Walking Hindus of Singapore," *National Geographic Magazine*, April, 1931; and "Singapore, Crossroads of the East," March, 1926.

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Hundreds of thousands of square miles once marked "unknown" on the maps of the world have been filled in as a result of its exploratory expeditions. Historic horizons have been pushed back hundreds of years by its archeological researches. In natural science, The Society has revealed to the average man the wonders and beauty that lie just outside his doorstep.

Pioneered in Color Photography

The Society has pioneered in the field of photography. Because photographs portray many geographic facts more accurately and vividly than words, lavish use of pictures has been made in The Society's publications. As early as November, 1910, The Magazine used color plates, and in 1916 began the reproduction of natural color photographs. Today it reproduces more full-color pictures than any other publication. The Society's constant use and support of natural color photography has been an important factor in the development of several processes.

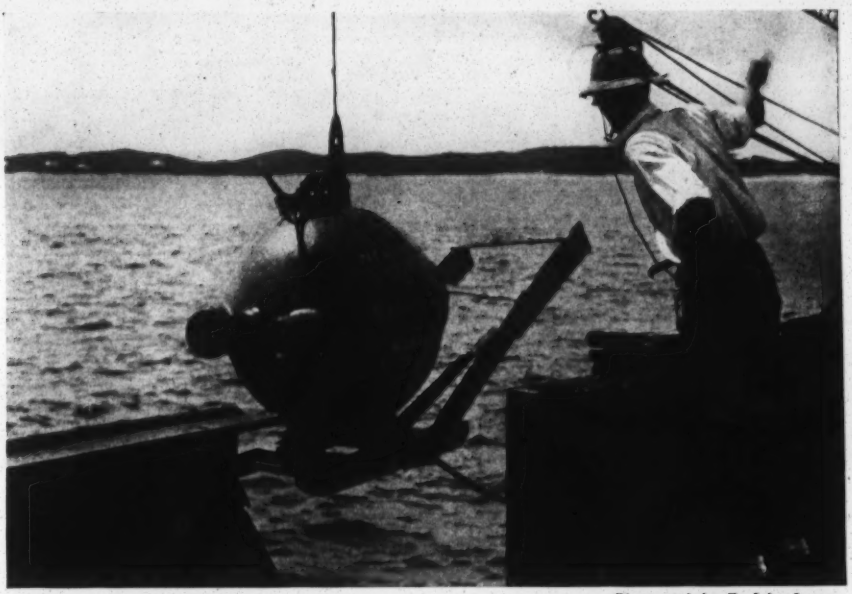
The usefulness of the *National Geographic Magazine* in schools was soon apparent, and in order to take care of numerous requests from educators for additional data and up-to-date geographic information a School Service Department was established in 1916. The Society further cooperated with educators by publishing the Pictorial Geography series, and the GEOGRAPHIC NEWS BULLETINS. The latter were prepared by The Society for publication by the U. S. Department of the Interior, Bureau of Education (now the Office of Education), from October 6, 1919, until May 9, 1921.

Since February 6, 1922, however, the BULLETINS have been published by The Society as a part of its work to increase and diffuse geographic knowledge.

Throughout its 50th anniversary year The Society's headquarters in Washington will welcome groups of teachers and students who wish to see its collection of enlarged photographs, expedition relics, and Hubbard Medals (The Society's highest award) in Explorer's Hall. The Society's library, containing 16,000 volumes and hundreds of pamphlets and manuscripts relating to geography and exploration, will also be available to accredited educators, librarians, or research workers.

Note: See also "National Geographic Society and Its Magazine," in the January, 1936, *National Geographic Magazine*. A more complete account of The Society's expeditions and Hubbard Medal recipients, maps, articles and photographs will be found in the introduction to the new Cumulative Index to the *National Geographic Magazine*, 1899-1936, inclusive. The 1937 Supplement to the Index is now available.

Bulletin No. 1, February 7, 1938.



Photograph by E. John Long

THE BATHYSPHERE WHICH CARRIED THE SOCIETY'S FLAG "FARTHEST DOWN"

On August 15, 1934, Dr. William Beebe and Otis Barton made a world's record descent of 3,028 feet into the Atlantic Ocean off Bermuda, on an expedition sponsored jointly by the National Geographic Society and the New York Zoological Society. Through the quartz windows many strange new forms of submarine life were seen, and the observation of the scientists were telephoned to the surface.

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Khartoum Reverses History Which Gave England Two Popular Heroes

EGYPTIAN soldiers have come back to Khartoum, capital of the Anglo-Egyptian Sudan, where the Blue Nile and White Nile meet. Thus begins another chapter in the history of this African inland trading center, famous as a scene of both tragedy and triumph in British empire-building.

Khartoum, since its establishment more than 100 years ago, has been the focal point of the stormy history of the Sudan, due south of Egypt, along the upper reaches of the Nile. Egyptian troops have returned under terms of the new Anglo-Egyptian treaty. They were withdrawn in 1924 after assassination of Sir Lee Stack, British commander-in-chief in Egypt.

"Chinese" Gordon and Kitchener

Khartoum helped to make famous two noted names in British history, Gen. Charles George Gordon (better known as "Chinese" Gordon for his military exploits in China) and Lord Kitchener, later also a noted leader in the World War.

It was an earlier withdrawal of Egyptian soldiers from Khartoum in 1884 that first brought the city to world notice. A rebellion had broken out in the Sudan region led by Mohammed Ahmed, who proclaimed himself to be the long-looked-for leader, or Mahdi, of the Moslem world. Great Britain had troops in Egypt and the British Government sent General Gordon to Khartoum to take charge of the removal of Egyptian soldiers and civilians in the face of the Mahdi's superior forces.

Street Design Patterned on British Union Jack

Before Gordon could carry out this plan, however, he was trapped by the Mahdi's army. A British force started to his assistance but was delayed. Meanwhile the insurgents had captured Khartoum. General Gordon was killed. There was a general massacre and the city was destroyed.

In 1898 General Kitchener with a combined British and Egyptian army recaptured Khartoum and the nearby city of Omdurman, and the Sudan came under joint British and Egyptian rule. For this accomplishment he received the title Baron Kitchener of Khartoum.

Khartoum is a handsome modern city, with a two-mile esplanade along the river bank and streets laid out in designs taken from the form of the British Union Jack. In front of the governor-general's palace stands a statue of General Gordon mounted on a camel.

Natural Trading Center

Khartoum is a natural site for a trading center. It stands at the junction of the Blue Nile, flowing down from the heights of Ethiopia, and the White Nile, rising 1,000 miles away in Lake Victoria in Uganda. Trade moves naturally up and down these waterways. In addition, a railroad runs from Khartoum down the Nile to Wadi Halfa, on the border of Egypt proper, and another links the Sudanese capital with Port Sudan and Suakin on the Red Sea.

Europeans, Egyptians, Greeks, and Syrians mingle with the native population of negroes and Arabs. Khartoum has about 46,000 people, while the neighboring native city of Omdurman is more than twice as large.

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BABY CARRIAGES AND PORCH FURNITURE MAY GET THEIR START IN SINGAPORE'S JUNGLES

Cane articles are the cheapest output of Singapore's furniture industry, which deals also in tropical hardwoods such as teak with veneer of thuya, walnut, or mahogany. Cane (or rattan, locally called rotan) is popular in the natural pale biscuit color and in bright lacquers as well. Bundles of the cane stems are distributed among native workers to be cleaned (above), a process of scraping the rattan by hand back and forth against sticks anchored to stakes driven into the ground.

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Liberia: Monrovia Has One of Four U. S. Legations in Africa, Mar. 8, 1937.
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Additional ill.: Carillon lesson, Malines, Nov. 15, 1937.
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Rome-Berlin "Axis" as a Capital-to-Capital Highway, Oct. 18, 1937.
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Khartoum means "elephant's trunk," in the Arabic dialect spoken in that locality, the name arising from the shape of the promontory where the Blue and White Niles meet.

In the old days, Khartoum was the center of a flourishing slave trade. Today cotton (see illustration, below), gum arabic, grains, hides and skins, live stock, dates and ivory move through its markets and cross its wharves to be shipped down the Nile.

Note: See also "Unbeliever Joins the Hadj," *National Geographic Magazine*, June, 1934; "Three-Wheeling Through Africa," January, 1934; "Two Fighting Tribes of the Sudan," October, 1929; "Crossing the Untraversed Libyan Desert," September, 1924; and "Adventures Among the 'Lost Tribes of Islam,'" January, 1924.

Bulletin No. 3, February 7, 1938.

Photograph by Owen Tweedy

COTTON IS BAGGED, AS WELL AS BALED, AT KHARTOUM

Both long and short staple Egyptian and American cottons are grown on Sudan acres irrigated from the upper Nile, and in some areas the crop is planted with the hope that rain will be sufficient for it. To land as level as a billiard table, water is brought in a canal and sold to tenants at a small charge per irrigated acre. Some black Moslem farmers prefer watering their crops by hand, and plowing with a wooden stick hitched to a bull. The government encourages cotton growers by subsidies and loans.

Canton: Eclipse Expedition Gathers Rich Harvest of Scientific Facts, Oct. 4, 1937.
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Additional ill.: Highway destroyed by landslide, Kansu Province, China, Dec. 20, 1937.
Jinrikishas: Still the Rickshaw Rolls Right Along, Mar. 8, 1937.
Additional ill.: Rickshaws at Yokohama dock, Japan, Oct. 11, 1937.
Railroads: "Back Doors" to China Again Important, 3 ills., Nov. 8, 1937.
Earth's Surface Changed by 1937 Engineering, Jan. 17, 1938.
Sleds: "Huskies" Vie in Annual Dog Sled Derbies, Mar. 1, 1937.
Additional ill.: Eskimo sleds, Greenland, Oct. 4, 1937.
Subways: Subways Speed Traffic in Many World Metropolises, Apr. 5, 1937.
Tractors: Ill.: Citroën-Haardt Trans-Asiatic Expedition, Nov. 8, 1937.
Trains: Ills.: Trains at triple rail crossing, Richmond, Virginia, Oct. 11, 1937; Streamlined and old-type trains, Bizerte, Tunisia, Nov. 22, 1937; Florida Special, Jan. 24, 1938.
Tunnels: Ill.: Tunnel through Dolomites, Italy, Oct. 18, 1937.

COMMERCE AND INDUSTRY

General: Detroit Selected for Next N. E. A. Convention, 2 ills., May 10, 1937.
The Mediterranean, Sea of Commerce and Destiny, Oct. 11, 1937.
Canton Created China's First Impression on World, 2 ills., Oct. 18, 1937.
Agriculture: Modern Maya Live in Shadows of Ancient Temples, Dec. 6, 1937.
Additional ills.: Plowing with oxen, Portugal, Mar. 8, 1937; Andalusian farmer, Spain, Mar. 15, 1937; Farming in Japan, Oct. 11, 1937; Sacking potatoes, Ireland, Jan. 10, 1938.

UMI

Latvia: Ill.: Lumber industry, Oct. 25, 1937.
Norway: Norway Makes Spelling a Matter of National Concern, 3 ills., Jan. 3, 1938.
Portugal: Portugal, The Sunset Land, 3 ills., Mar. 8, 1937.
Romania: Romania: Where a European Melting Pot Fails to Function, 2 ills., Jan. 31, 1938.
Additional ill.: "Blessing of the Waters" ceremony, Dambovita River, Jan. 3, 1938.
Spain: Oviedo, Watchdog of Spain's Northern Mines, Mar. 15, 1937.
Bilbao, Spain's Citadel of the Basques, 2 ills., Apr. 26, 1937.
Asturias, the Wales of Spain, Oct. 18, 1937.
Barcelona, State and National Capital, Nov. 22, 1937.
Teruel Comes into Spain's Headlines, Jan. 10, 1938.
Additional ill.: Subway entrance, Madrid, Apr. 5, 1937.
See also *Minorca* and *Rio de Oro*.
Switzerland: Basel, Switzerland's Strictly Business City, Apr. 12, 1937.
Switzerland: Peace Hub of the World, Oct. 4, 1937.
Rare Los Angeles Landslide Like Common Swiss Avalanches, Dec. 20, 1937.
Additional ills.: Gruyère cheese factory, Apr. 5, 1937; League of Nations delegates in Council Chamber, Geneva, Jan. 10, 1938.

POLAR REGIONS

General: Explorers of 1937 Found New Frontiers, 2 ills., Jan. 17, 1938.
Greenland: Thule: Threshold of Northwest Greenland, Oct. 4, 1937.

NORTH AMERICA

Alaska: Alaska's Black Rapids Glacier Revives Curiosity About "Rivers of Ice," 3 ills., Mar. 15, 1937.
Additional ill.: Valley of Ten Thousand Smokes, Feb. 7, 1938.
Canada: "Huskies" Vie in Annual Dog Sled Derbies, Mar. 1, 1937.
Newsprint: From Forest to Front Page, Oct. 18, 1937.
Labrador: Ill.: Amateur fiddler broadcasting, Dec. 13, 1937.
Mexico: Chilpancingo, Scene of Mexico's Declaration of Independence, Mar. 22, 1937.
Newfoundland: Newfoundland Sealing Fleet Catches Shoes and Soap in the Raw, 2 ills., Mar. 22, 1937.

UNITED STATES

General: John Burroughs "Discovered" America's Outdoors, May 3, 1937.
Where "Towers Sing" in the United States, Nov. 15, 1937.
California: Man-Made Island Rising in San Francisco Bay, Oct. 11, 1937.
Rare Los Angeles Landslide Like Common Swiss Avalanches, Dec. 20, 1937.
Additional ill.: Loading fruit on ship, Los Angeles, Apr. 19, 1937.
District of Columbia: Supreme Court Now No. 1 Visitors' Attraction in Capital, Mar. 1, 1937.
A Greener and Grayer Washington Greets the Spring, Mar. 22, 1937.
Fingerprints to Protect Civilians, as Well as Catch Criminals, Apr. 12, 1937.
Tent City Unfolding Along Potomac for Nation's Boy Scouts, May 10, 1937.
Additional ill.: Recording of early graphophone model, Smithsonian Institution, Nov. 29, 1937.
Florida: Bringing Back the Yesterdays of Old St. Augustine, Apr. 5, 1937.
Seminoles, the "Runaway" Indians, Nov. 1, 1937.
South with the Sun to Florida, Jan. 24, 1938.
Georgia: Ills.: Log cabins in Okefinokee Swamp, Feb. 15, 1937; Grading paper shell pecans, Albany, Nov. 29, 1937.
Illinois: Ill.: Flood rescue work near Cairo, Feb. 15, 1937.
Kentucky: Ill.: Negro slave at Bardstown, Feb. 15, 1937.
Louisiana: New Orleans, The Crescent City, Now a Full Moon, 2 ills., Feb. 22, 1937.
Michigan: Detroit Selected for Next N. E. A. Convention, 2 ills., May 10, 1937.
Mississippi: Ill.: Astronomical observatory, University of Mississippi, Jan. 10, 1938.
Montana: Ill.: Swans on Lower Red Rock Lake, Oct. 25, 1937.
New Hampshire: Vermont-New Hampshire Boundary Line Is Longest Recently Adjusted, Apr. 19, 1937.
Additional ill.: Ice carnival, Dartmouth College, Mar. 1, 1937.
New York: Ills.: John Burroughs' cabin near West Park, May 3, 1937; Photograph taken during eclipse, Long Island, Dec. 6, 1937.
Ohio: Ill.: Ohio River flood scene, Cincinnati, Feb. 15, 1937.
Pennsylvania: Stephen Foster, a Pittsburgh Minstrel of the South, 2 ills., Feb. 15, 1937.
South Dakota: Ill.: Stratosphere balloon near Rapid City, Feb. 7, 1938.
Vermont: Vermont-New Hampshire Boundary Line Is Longest Recently Adjusted, Apr. 19, 1937.
Virginia: George Washington's Never-Never Land—The "Cherry Tree" Farm, Feb. 22, 1937.
Williamsburg, Where the Colonial Past Comes to Life, Mar. 1, 1937.
"Battle of the Crater" To Be Re-enacted at Petersburg, Apr. 26, 1937.
Richmond's Two Hundred Years and Two Distinct Traditions, Oct. 11, 1937.
Williamsburg Built on Records, Research, and Old Foundations, Nov. 15, 1937.
Additional ill.: Towers of Naval Radio Station, Arlington, Apr. 26, 1937.
Washington: Ill.: Wilbur's Cave, Mount Rainier, Mar. 15, 1937.
Wisconsin: Ill.: Paper factory, Park Falls, Oct. 18, 1937.

CENTRAL AMERICA

Honduras: Peace Without War in Honduras-Nicaragua Boundary Pact, Dec. 13, 1937.
Nicaragua: Peace Without War in Honduras-Nicaragua Boundary Pact, Dec. 13, 1937.

SOUTH AMERICA

General: South America Also in the Spotlight, Nov. 8, 1937.
Argentina: Stars Fell on an Argentine Boundary, Jan. 17, 1938.
Brazil: Brazil Sets Up First Corporate State in New World, 3 ills., Nov. 29, 1937.
Additional ill.: Transporting rubber on the Rio Negro, Nov. 8, 1937.
British Guiana: Ill.: Coco-de-mer tree in botanic garden, Georgetown, Nov. 22, 1937.
Chile: Explosion Rocks Largest Copper Mine, Chuquicamata in Chile, Feb. 15, 1937.
See also *Juan Fernández Island*.
Peru: The Humboldt Current: A "River" in the Ocean, 1 map, Apr. 26, 1937.
Additional ills.: Great Wall of Peru, Apr. 5, 1937; Peruvian Indians, Apr. 5, 1937; Ruins of Machu Picchu, Feb. 7, 1938.

ISLANDS

General: Arid Pacific Islands Have Airport Importance, Mar. 1, 1937.
The Ghost Walks in Talks of German Colonies, 3 ills., Dec. 20, 1937.
Bermuda: Wings over Bermuda, Oct. 25, 1937.
Additional ill.: Lowering bathysphere into sea, Feb. 7, 1938.

Costumes and Clothing—*Continued*
South Africa, Mar. 8, 1937; Andalusian farmer, Spain, Mar. 15, 1937; Papuan tribesmen, New Guinea, Mar. 22, 1937; Peruvian Indians, Apr. 5, 1937; Basque fisherman, Apr. 26, 1937; Knights in Pageant of Runnymede, England, May 3, 1937; Japanese dress, Oct. 11 and 25, 1937; Seminole Indians, Florida, Nov. 1, 1937; Chinese and Indo-Chinese, Yunnan Province, China, Nov. 8, 1937; Polynesian girls, Nov. 22, 1937; Native dress, Czechoslovakia, Dec. 6, 1937; Modern Mayan dress, Yucatan, Dec. 6, 1937; Chinese coolies, Hong Kong, Dec. 13, 1937; Native ruler and attendants, Foumban, Cameroons, Dec. 20, 1937; Norwegian dress, Jan. 3, 1938; Fiesta costume, Valencia, Spain, Jan. 10, 1938; Gaucho, Argentina, Jan. 17, 1938; Embroidered blouse and skirt, Romania, Jan. 31, 1938.

Education: New Orleans, The Crescent City, Now a Full Moon, 2 ills., Feb. 22, 1937.
Detroit Selected for Next N. E. A. Convention, 2 ills., May 10, 1937.
Eclipses Once Dreaded; Now Eagerly Studied, Dec. 6, 1937.
National Geographic Society 50 Years Old, 5 ills., Feb. 7, 1938.
Additional ills.: Chinese child choosing his career, Oct. 4, 1937; Astronomy class, University of Mississippi, Jan. 10, 1938.

Eskimos: Ill.: Children playing, Peteravik, Greenland, Oct. 4, 1937.

Expeditions and Exploration: Eclipse To Be Studied from Desert Islands, Mar. 8, 1937.
Eclipse To Be Described by Radio from Pacific Island, 2 ills., Apr. 5, 1937.
Falconry Expert To Hunt Rare African Birds with Camera, Apr. 12, 1937.
Unusual Eclipse of Sun To "Sit" for Portrait in Oils, 1 map, May 10, 1937.
Kwangsi Province, China's "Dixie," Goal of Expedition, 2 ills., May 10, 1937.
Eclipse Expedition Gathers Rich Harvest of Scientific Facts, Oct. 4, 1937.
Thule: Threshold of Northwest Greenland, Oct. 4, 1937.
Modern Noah's Ark Returns with Rare Animals for Uncle Sam's Zoo, 2 ills., Oct. 18, 1937.
Mystery of Lohon Plant Solved in Remote Area of China, Nov. 1, 1937.
Spectacles Staged by 1937 Skies, Jan. 10, 1938.
Explorers of 1937 Found New Frontiers, 2 ills., Jan. 17, 1938.
National Geographic Society 50 Years Old, Feb. 7, 1938.

Flags: Ills.: Japanese, Oct. 25, 1937; United States and National Geographic Society, Feb. 7, 1938.

Forts and Fortresses: Hospitable Rutbah Wells in an Inhospitable Desert, Mar. 15, 1937.
Additional ill.: Fort Marion, St. Augustine, Florida, Apr. 5, 1937.

Fountains: Ill.: Fountain playing, Versailles, France, Nov. 1, 1937.

Government: Supreme Court Now No. 1 Visitors' Attraction in Capital, Mar. 1, 1937.
Monrovia Has One of Four U. S. Legations in Africa, Mar. 8, 1937.
State Lines Being Smoothed Out in Northern Germany, Mar. 8, 1937.
New Status for Lubeck, Germany's Deposed Queen of the Baltic, Apr. 5, 1937
New Nation Reported in North China: Mongukuo, 2 ills., Apr. 12, 1937.
Knitting Together the Crazy Quilt That Is India, May 3, 1937.
Switzerland: Peace Hub of the World, Oct. 4, 1937.
Democracy Returns to Estonia, Oct. 25, 1937.
The Simmering Cauldron That Is Palestine, Nov. 8, 1937.
Barcelona, State and National Capital, Nov. 22, 1937.
Brazil Sets Up First Corporate State in New World, 3 ills., Nov. 29, 1937.
China Puts Its Governmental Eggs in Several Baskets, 2 ills., Dec. 6, 1937.
Ballots and Edicts, Treaties and Armies Changed Government Patterns in 1937, 3 ills., Jan. 10, 1938.

History: George Washington's Never-Never Land—The "Cherry Tree" Farm, Feb. 22, 1937.
Williamsburg, Where the Colonial Past Comes to Life, Mar. 1, 1937.
"Battle of the Crater" To Be Re-enacted at Petersburg, Apr. 26, 1937.
Modern Pilgrim's Map of British Isles Stresses Human Interest, 3 ills., May 3, 1937.
Richmond's Two Hundred Years and Two Distinct Traditions, Oct. 11, 1937.
Pershing Statue Overlooks Versailles, 2 ills., Nov. 1, 1937.
Additional ill.: Tintype photography, Greenfield Village, Detroit, May 10, 1937.

Holidays, Festivals, and Celebrations: Flower Festivals Climax French Riviera's Season, 3 ills., Mar. 1, 1937.
Britain's Crown Jewels in Use for Coronation, May 10, 1937.
Tent City Unfolding Along Potomac for Nation's Boy Scouts, May 10, 1937.
Christmas Candy Gives New Sweets to Old Sweet Tooth, Dec. 20, 1937.
"Old Christmas," in January, Still Celebrated, Jan. 3, 1938.
Additional ills.: Ice carnival, Dartmouth College, New Hampshire, Mar. 1, 1937; Norwegian *springdans* Jan. 3, 1938.

Houses: Modern Maya Live in Shadows of Ancient Temples, Dec. 6, 1937.
Additional ills.: Log cabins, Georgia, Feb. 15, 1937; House in Creole Quarter, New Orleans, Feb. 22, 1937; Restored Governor's Palace, Williamsburg, Virginia, Mar. 1, 1937; Thatched house, New Guinea, Mar. 22, 1937; Thatched cottage, England, May 3, 1937; John Burroughs' cabin, New York, May 3, 1937; Igloos, Peteravik, Greenland, Oct. 4, 1937; Nomads' tents, Morocco, Nov. 22, 1937; Indian adobe, Brazil, Nov. 29, 1937; Oberammergau, Germany, Dec. 20, 1937; Interior of Norwegian home, Jan. 3, 1938.

Indians: Seminoles, the "Runaway" Indians, Nov. 1, 1937.
Modern Maya Live in Shadows of Ancient Temples, Dec. 6, 1937.
Additional ills.: Peruvian, Apr. 5, 1937; Brazilian, Nov. 29, 1937.

Language: Norway Makes Spelling a Matter of National Concern, 3 ills., Jan. 3, 1938.

Magazines: National Geographic Society 50 Years Old, 5 ills., Feb. 7, 1938.

Music: Stephen Foster, a Pittsburgh Minstrel of the South, 2 ills., Feb. 15, 1937.
Where "Towers Sing" in the United States, Nov. 15, 1937.
Alexander Graham Bell's Milepost in the Progress of Sound-Recording, Nov. 29, 1937.
Cremona Honors Stradivari, Ace Violin Maker, Dec. 13, 1937.
Additional ills.: Musicians going to festival, St. Wolfgang See, Austria, Apr. 19, 1937; Native music, Haiti, Nov. 15, 1937; Festival music, Norway, Jan. 3, 1938.

National Geographic Society: A Power Plant for Facts in the Newest Cumulative Index, Feb. 22, 1937.
Eclipse To Be Studied from Desert Islands, Mar. 8, 1937.
Eclipse to Be Described by Radio from Pacific Island, 2 ills., Apr. 5, 1937.
Falconry Expert to Hunt Rare African Birds with Camera, Apr. 12, 1937.
Modern Pilgrim's Map of British Isles Stresses Human Interest, 3 ills., May 3, 1937.
Unusual Eclipse of Sun to "Sit" for Portrait in Oils, 1 map, May 10, 1937.
Kwangsi Province, China's "Dixie," Goal of Expedition, 2 ills., May 10, 1937.
Eclipse Expedition Gathers Rich Harvest of Scientific Facts, Oct. 4, 1937.
Modern Noah's Ark Returns with Rare Animals for Uncle Sam's Zoo, 2 ills., Oct. 18, 1937.
Mystery of Lohon Plant Solved in Remote Area of China, Nov. 1, 1937.
Home Climate, Sun-Basking and Imitation Moonlight for National Zoo Residents, Nov. 8, 1937
South America Also in the Spotlight, Nov. 8, 1937.
Spectacles Staged by 1937 Skies, Jan. 10, 1938.
Explorers of 1937 Found New Frontiers, 2 ills., Jan. 17, 1938.
National Geographic Society 50 Years Old, 5 ills., Feb. 7, 1938.

National Parks and Monuments: Ills.: Kruger National Park, Union of South Africa, Feb. 15, 1937 and Jan. 17 1938; Fort Marion, St. Augustine, Florida, Apr. 5, 1937; Mount Katmai, Alaska, Feb. 7, 1938.

Police: Ill.: British policeman, Palestine, Nov. 8, 1937.

Races and Tribes: New Guinea: Divided Three Ways, 2 ills., Mar. 22, 1937.
Romania: Where a European Melting Pot Fails to Function, 2 ills., Jan. 31, 1938.
Sky Route to New Zealand, 2 ills., Jan. 31, 1938.
Additional ills.: Polynesians, Nov. 22, 1937; Micronesian, Dec. 20, 1937; Pygmy of Katingor, New Guinea, Jan. 17, 1938.
See also *Eskimos* and *Indians*.

UMI

Bay Rum: Ill.: Casks of bay rum, Charlotte Amalie, Virgin Islands, Mar. 22, 1937.
Camphor: Ill.: Camphor blocks, Taiwan (Formosa), Oct. 25, 1937.
Candy: Christmas Candy Gives New Sweets to Old Sweet Tooth, Dec. 20, 1937.
Cheese: Cheese Has Infinite Variety, as Well as Odor, 2 ills., Apr. 5, 1937.
Additional ill.: Cheese-making, Burgistein, Switzerland, Oct. 4, 1937.
Coconuts: The Seychelle Islands: Lonely Paradise for Exiles, Nov. 22, 1937.
Coins: Ill.: Stone coin of Yap Island, Dec. 20, 1937.
Copper: Explosion Rocks Largest Copper Mine, Chuquicamata in Chile, Feb. 15, 1937.
Cork: Ill.: Hauling cork, Portugal, Mar. 8, 1937.
Cotton: Ill.: Natives bagging cotton, Anglo-Egyptian Sudan, Feb. 7, 1938.
Dams: The Beaver—Animal "Engineer"—Put To Work, Jan. 3, 1938.
Eggs: Ills.: Baskets of export eggs, Shanghai, China, Oct. 4, 1937; Candling eggs for shipping, Denmark, Nov. 1, 1937.
Fairs and Expositions: Johannesburg Leads a Double Life, Above Ground and Below, Feb. 15, 1937.
Basel, Switzerland's Strictly Business City, Apr. 12, 1937.
Man-Made Island Rising in San Francisco Bay, Oct. 11, 1937.
Fertilizer: The Humboldt Current: A "River" in the Ocean, 1 map, Apr. 26, 1937.
Fishing: Bilbao, Spain's Citadel of the Basques, 2 ills., Apr. 26, 1937.
Drowned Canyons Are Explorers' New Happy Hunting Ground, 1 map, Oct. 25, 1937.
Strawberries and Lobsters from "Robinson Crusoe's Isle," Jan. 24, 1938.
Additional ills.: Fishing quarters, Italian Riviera, Mar. 15, 1937; Net fishing, China, Dec. 6, 1937.
Food: Ills.: Peruvian Indians' meal, Apr. 5, 1937; Chinese dinner, May 10, 1937.
Fruit: Mystery of Lohon Plant Solved in Remote Area of China, Nov. 1, 1937.
Covent Garden Market: London's Flower, Vegetable, and Fruit Basket, Dec. 13, 1937.
Dominica "Drifts" to Windward, 1 map, Jan. 10, 1938.
Additional ill.: Shipping of citrus fruits, Los Angeles, Apr. 19, 1937.
Handicrafts: Ill.: Laborers embroidering shawl, Canton, China, May 10, 1937.
Hides: Ill.: Selling strips of rawhide, Albania, Dec. 20, 1937.
Honey: Busy Bee Not So Busy—Result: Honey Shortage, Nov. 22, 1937.
Additional ill.: Storage in hives, Czechoslovakia, Dec. 6, 1937.
Imports and Exports: How China Conflict Invades American Home, 3 ills., Oct. 4, 1937.
Japan's Relative Scarcity of Home-Grown War Materials, 3 ills., Oct. 11, 1937.
"Made in Japan" Label in Many American Shops, 3 ills., Oct. 25, 1937.
Bombing of Amoy Recalls Boston Tea Party, Nov. 15, 1937.
Additional ill.: Export eggs, Denmark, Nov. 1, 1937.
Lighthouses: Sea Safety Due to Inventors as Well as Lighthouse Keepers, Jan. 3, 1938.
Additional ills.: Bishop Rock Lighthouse, Scilly Islands, Apr. 12, 1937; Pharos of Alexandria, Egypt, Oct. 11, 1937.
Lumber: Ill.: Trimming logs into railroad ties, Latvia, Oct. 25, 1937.
Markets and Venders: Covent Garden Market: London's Flower, Vegetable, and Fruit Basket, Dec. 13, 1937.
Additional ills.: Indian market, Ayutla, Mexico, Mar. 22, 1937; Open-air market, Basel, Switzerland, Apr. 12, 1937; Fish peddler, Tokyo, Japan, Oct. 11, 1937; Market place, Yunnan Province, China, Nov. 8, 1937; Outdoor market, Albania, Dec. 20, 1937.
Mines and Mining: Explosion Rocks Largest Copper Mine, Chuquicamata in Chile, Feb. 15, 1937.
Johannesburg Leads a Double Life, Above Ground and Below, Feb. 15, 1937.
Oviedo, Watchdog of Spain's Northern Mines, Mar. 15, 1937.
Newsprint: Newsprint: From Forest to Front Page, Oct. 18, 1937.
Nuts: Indians Introduced Nuts to American Festive Board, 2 ills., Nov. 29, 1937.
Palm Oil: Ill.: Boiling palm nuts for oil, Liberia, Mar. 8, 1937.
Papyrus: Ill.: Papyrus swamp, Uganda, Mar. 15, 1937.
Ports and Harbors: Bombing of Amoy Recalls Boston Tea Party, Nov. 15, 1937.
Hong Kong, A "Bit of England" in China, 2 ills., Dec. 13, 1937.
Tsingtao: Once German Pride of the East, Jan. 10, 1938.
Australia's 150th Birthday Party Starts at Sydney, 3 ills., Jan. 24, 1938.
Singapore, British Lion on Guard in the Orient, Feb. 7, 1938.
Additional ills.: Antofagasta, Chile, Feb. 15, 1937; Shanghai, China, Oct. 4, 1937; Yokohama, Japan, Oct. 11, 1937; Pago Pago, Samoa, Jan. 31, 1938.
Potatoes: Ill.: Sacking potatoes, Ireland, Jan. 10, 1938.
Pottery: Ill.: Jugs, Famagusta, Cyprus, May 3, 1937.
Rattan: Ill.: Cleaning cane stems, Singapore, Feb. 7, 1938.
Rice: Ill.: Rice farming, Japan, Oct. 11, 1937.
Rubber: Ill.: Latex, Brazil, Nov. 8, 1937.
Shoes: Newfoundland Sealing Fleet Catches Shoes and Soap in the Raw, 2 ills., Mar. 22, 1937.
Additional ill.: Native making shoes, Canton, China, Oct. 18, 1937.
Silk: Ill.: Unwinding thread from cocoons, Japan, Oct. 25, 1937.
Soap: Newfoundland Sealing Fleet Catches Shoes and Soap in the Raw, 2 ills., Mar. 22, 1937.
Soy Beans: Ill.: Trainload of soy bean cakes, Dairen, Manchuria, Jan. 17, 1938.
Tea: Bombing of Amoy Recalls Boston Tea Party, Nov. 15, 1937.
Additional ill.: Chinese nomads' brick tea, Apr. 12, 1937.

HUMAN GEOGRAPHY

Archeology: Bringing Back the Yesterdays of Old St. Augustine, Apr. 5, 1937.
Additional ills.: Great Wall of Peru, Apr. 5, 1937; Preparing bones of *Baluchitherium* for shipment, China, Apr. 12, 1937; Stone structure, Minorca, Nov. 1, 1937; Great Wall of China, Shansi Province, Nov. 29, 1937; Machu Picchu, Peru, Feb. 7, 1938.
Architecture: Supreme Court Now No. 1 Visitors' Attraction in Capital, Mar. 1, 1937.
Williamsburg, Where the Colonial Past Comes to Life, Mar. 1, 1937.
A Greener and Grayer Washington Greets the Spring, Mar. 22, 1937.
Williamsburg Built on Records, Research, and Old Foundations, Nov. 15, 1937.
Additional ills.: Old house with grilled balcony, New Orleans, Feb. 22, 1937; House of the Shippers Guild, Lubeck, Germany, Apr. 5, 1937; Battle Abbey, Richmond, Virginia, Apr. 26, 1937; Skyscrapers, Canton, China, Oct. 18, 1937; Cathedral, Barcelona, Spain, Nov. 22, 1937.
Art: Unusual Eclipse of Sun to "Sit" for Portrait in Oils, 1 map, May 10, 1937.
Additional ill.: Carving, shell and bead work, Foumban, Cameroons, Dec. 20, 1937.
Boy Scouts: Tent City Unfolding Along Potomac for Nation's Boy Scouts, May 10, 1937.
Carillons: Where "Towers Sing" in the United States, Nov. 15, 1937.
Castles and Palaces: Pershing Statue Overlooks Versailles, 2 ills., Nov. 1, 1937.
Additional ills.: Fifteenth-century castle, Potes, Spain, Oct. 18, 1937; Native ruler's palace, Foumban, Cameroons, Dec. 20, 1937.
Children: Ills.: Portuguese, Mar. 8, 1937; Italian, Mar. 15, 1937; Rio de Oro, Africa, Apr. 19, 1937; Chinese, Oct. 4, 1937; Eskimos, Greenland, Oct. 4, 1937; Japanese, Oct. 25, 1937; French, Nov. 1 and Dec. 20, 1937.
Churches and Cathedrals: Westminster Abbey Resumes Its Lure for Sightseers, Nov. 29, 1937.
Additional ills.: Church with shrine, Hallstaater See, Austria, Apr. 19, 1937; Cathedral, Barcelona, Spain, Nov. 22, 1937.
Costumes and Clothing: Britain's Crown Jewels in Use for Coronation, May 10, 1937.
Tent City Unfolding Along Potomac for Nation's Boy Scouts, May 10, 1937.
Additional ills.: Masquerade costume, French Riviera, Mar. 1, 1937; Colonial dress, Williamsburg, Virginia, Mar. 1, 1937; Peasant women, Portugal, Mar. 8, 1937; Rickshaw runner, Durban, Union of

Aëronautics: Ills.: Stratosphere balloon *Explorer II*, South Dakota, Feb. 7, 1938; *China Clipper*, Dec. 13, 1937.
Astronomy: Eclipse to Be Studied from Desert Islands, Mar. 8, 1937.
Eclipse to Be Described by Radio from Pacific Island, 2 ills., Apr. 5, 1937.
Unusual Eclipse of Sun to "Sit" for Portrait in Oils, 1 map, May 10, 1937.
Eclipse Expedition Gathers Rich Harvest of Scientific Facts, Oct. 4, 1937.
Ghostly Comets Haunt the Skies, Nov. 15, 1937.
Eclipses Once Dreaded; Now Eagerly Studied, Dec. 6, 1937.
Spectacles Staged by 1937 Skies, Jan. 10, 1938.
Stars Fell on an Argentine Boundary, Jan. 17, 1938.
New Asteroid Joins Throng of Wandering Worlds, Jan. 31, 1938.
Engineering: Fitting a Strait-Jacket to the Father of Waters, 2 ills., 1 map, Feb. 22, 1937.
Man-Made Island Rising in San Francisco Bay, Oct. 11, 1937.
Tiny Denmark a Big-Bridge Builder, 2 ills., Nov. 1, 1937.
Earth's Surface Changed by 1937 Engineering, Jan. 17, 1938.
Additional ill.: Surveying in swamp, Nicaragua, Dec. 13, 1937.
Fingerprinting: Fingerprints to Protect Civilians, as Well as Catch Criminals, Apr. 12, 1937.
Instruments, Machinery, etc.: Clock Ticks Heard Around the World: U. S. Navy Time Signals, Apr. 26, 1937.
Alexander Graham Bell's Milepost in the Progress of Sound-Recording, Nov. 29, 1937.
Sea Safety Due to Inventors as Well as Lighthouse Keepers, Jan. 3, 1938.
Additional ills.: Machine for sorting fingerprint cards, Washington, Apr. 12, 1937; Telescope, Canton Island Expedition, Oct. 4, 1937; Paper factory machinery, Park Falls, Wisconsin, Oct. 18, 1937; Sun compass, Jan. 17, 1938; Bathysphere, Bermuda, Feb. 7, 1938.
Medicine: Ill.: Inoculating a Mississippi flood victim, Feb. 22, 1937.
Photography: Falconry Expert to Hunt Rare African Birds with Camera, Apr. 12, 1937.
Additional ills.: Sun's eclipse at Ak Bulak, U. S. S. R., Mar. 8, 1937; Tintype photographer with camera, Greenfield Village, Detroit, May 10, 1937; Photograph of a comet, Nov. 15, 1937; Picture taken during solar eclipse, Long Island, New York, Dec. 6, 1937; Photograph showing a meteor trail, Jan. 31, 1938.
Radio: Eclipse to Be Described by Radio from Pacific Island, 2 ills., Apr. 5, 1937.
Winged Words "Bounce" by Short Wave Radio, Jan. 24, 1938.
Zoos: "World's Longest Sore Throat" No Joke to London Giraffe, Feb. 15, 1937.
Modern Noah's Ark Returns with Rare Animals for Uncle Sam's Zoo, 2 ills., Oct. 18, 1937.
Home Climate, Sun-Basking and Imitation Moonlight for National Zoo Residents, Nov. 8, 1937.
Paris Zoo Rich in Specimens and Historic Incidents, Dec. 20, 1937.

Photograph by R. F. Griggs

SO GALLANTLY STREAMING—THE FLAGS OF NATIONALITY AND DISCOVERY IN THE VALLEY OF TEN THOUSAND SMOKES

The discovery of the famous Valley of Ten Thousand Smokes in Alaska was one of the achievements of the several National Geographic Expeditions sent out between 1912 and 1930 to explore the region around Mt. Katmai and the volcanic activity of that giant crater itself. Countless fumaroles and miniature craters filled the Valley with smoke and steam, betraying the seething inferno beneath. After accounts of The Society's explorations had been published in the *National Geographic Magazine*, the region was set aside by the U. S. Government as the Mount Katmai National Monument.

UMI

Religion: A Palm Sunday Palm Monopoly Held by Bordighera, Mar. 15, 1937.
"Old Christmas," in January, Still Celebrated, Jan. 3, 1938.
Kufow, Confucian Chinese Holy of Holies, Jan. 31, 1938.
Additional ill.: Ritual for tabu on food, New Guinea, Mar. 22, 1937.
Resorts: Flower Festivals Climax French Riviera's Season, 3 ills., Mar. 1, 1937.
A Palm Sunday Palm Monopoly Held by Bordighera, Mar. 15, 1937.
Sports: "Huskies" Vie in Annual Dog Sled Derbies, Mar. 1, 1937.
Bowls and Bowling Still Thundering Through the Centuries, May 3, 1937.
Additional ills.: Playing golf, Midway Island, Mar. 1, 1937; Swimming sports, Sydney, Australia, Jan. 24, 1938.
Statues and Monuments: Pershing Statue Overlooks Versailles, 2 ills., Nov. 1, 1937.
Brussels, Belgium's City of War Memories, Nov. 8, 1937.
Kufow, Confucian Chinese Holy of Holies, Jan. 31, 1938.
Additional ill.: Statue of Dante, Washington, D. C., Mar. 22, 1937.
Town Criers: Town Crier's Bell Still Proclaims Danger, News, Commerce, 2 ills., Apr. 19, 1937.
U. S. Coast Guard: Ill.: Rescue work during flood, Illinois, Feb. 15, 1937.
U. S. Navy: Clock Ticks Heard Around the World: U. S. Navy Time Signals, Apr. 26, 1937.
See also *Expeditions and Exploration*.
Wills: The Geography of Wills and Inheritances, Mar. 15, 1937.

NATURAL HISTORY

General: John Burroughs "Discovered" America's Outdoors, May 3, 1937.
Birds: Falconry Expert to Hunt Rare African Birds with Camera, Apr. 12, 1937.
Modern Noah's Ark Returns with Rare Animals for Uncle Sam's Zoo, 2 ills., Oct. 18, 1937.
The Trumpeter Swan, a Vanishing American on the Increase, Oct. 25, 1937.
Speed Kings of Animal, Insect, and Fish Worlds, Dec. 6, 1937.
Additional ills.: Gooney birds, Midway Island, Mar. 1, 1937; Guanayes, Peruvian coast, Apr. 26, 1937; Bird House, National Zoological Park, Washington, Nov. 8, 1937; Lyrebird, Australia, Jan. 24, 1938.
Flowers: Flower Festivals Climax French Riviera's Season, 3 ills., Mar. 1, 1937.
Scilly Islands, Where England's Spring Spends the Winter, 1 map, Apr. 12, 1937.
Covent Garden Market: London's Flower, Vegetable, and Fruit Basket, Dec. 13, 1937.
Insects: Busy Bee not So Busy—Result: Honey Shortage, Nov. 22, 1937.
Speed Kings of Animal, Insect, and Fish Worlds, Dec. 6, 1937.
Additional ills.: Beehives, Czechoslovakia, Dec. 6, 1937; Moths caught by glowworms, Waitomo Caves, New Zealand, Jan. 31, 1938.
Mammals: "World's Longest Sore Throat" No Joke to London Giraffe, Feb. 15, 1937.
"Huskies" Vie in Annual Dog Sled Derbies, Mar. 1, 1937.
Newfoundland Sealing Fleet Catches Shoes and Soap in the Raw, 2 ills., Mar. 22, 1937.
Modern Noah's Ark Returns with Rare Animals for Uncle Sam's Zoo, 2 ills., Oct. 18, 1937.
Home Climate, Sun-Basking and Imitation Moonlight for National Zoo Residents, Nov. 8, 1937.
Speed Kings of Animal, Insect, and Fish Worlds, Dec. 6, 1937.
Paris Zoo Rich in Specimens and Historic Incidents, Dec. 20, 1937.
The Beaver—Animal "Engineer"—Put to Work, Jan. 3, 1938.
That Queer Quaint Beast the Hippopotamus, 2 ills., Jan. 17, 1938.
Additional ills.: Oxen, Portugal, Mar. 8, 1937; Dog of African nomad, Apr. 19, 1937; Elephants, India, May 3, 1937 and Jan. 10, 1938; Camels, Sahara Desert, Nov. 22, 1937; Sheep flock, Morocco, Nov. 22, 1937; Horse decorated for fiesta, Valencia, Spain, Jan. 10, 1938.
Plants: Mystery of Lohon Plant Solved in Remote Area of China, Nov. 1, 1937.
Additional ill.: Papyrus swamp, Uganda, Mar. 15, 1937.
Reptiles: Modern Noah's Ark Returns with Rare Animals for Uncle Sam's Zoo, 2 ills., Oct. 18, 1937.
Additional ill.: Alligator skin, Florida, Nov. 1, 1937.
Trees: A Palm Sunday Palm Monopoly Held by Bordighera, Mar. 15, 1937.
Additional ills.: Palms, Liberia, Mar. 8, 1937; Calabash, Haiti, Nov. 15, 1937; Coco-de-mer, British Guiana, Nov. 22, 1937; Singapore jungle, Feb. 7, 1938.

PHYSICAL GEOGRAPHY

Avalanches: Rare Los Angeles Landslide Like Common Swiss Avalanches, Dec. 20, 1937.
Boundaries: State Lines Being Smoothed Out in Northern Germany, Mar. 8, 1937.
Vermont-New Hampshire Boundary Line Is Longest Recently Adjusted, Apr. 19, 1937.
Hispaniola Has Border Trouble, 3 ills., Nov. 15, 1937.
Peace Without War in Honduras-Nicaragua Boundary Pact, Dec. 13, 1937.
Caves: Ills.: Wilbur's Cave, Mount Rainier, Washington, Mar. 15, 1937; Waitomo Caves, New Zealand, Jan 31, 1938.
Coastal Plains: Drowned Canyons Are Explorers' New Happy Hunting Ground, 1 map, Oct. 25, 1937.
Coral Reefs: Ill.: "Boilers," Bermuda, Oct. 25, 1937.
Deserts: Hospitable Rutbah Wells in an Inhospitable Desert, Mar. 15, 1937.
Additional ill.: Sahara dunes, Nov. 22, 1937.
Floods: Ohio River System Drains Area Almost as Large as Texas, 2 ills., Feb. 15, 1937.
Fitting a Strait-Jacket to the Father of Waters, 2 ills., 1 map, Feb. 22, 1937.
Floods Call for Special Dictionary, 2 ills., Feb. 22, 1937.
Glaciers: Alaska's Black Rapids Glacier Revives Curiosity About "Rivers of Ice," 3 ills., Mar. 15, 1937.
Lakes: Austria's Mountain Lake Paradise of the Salzkammergut, 2 ills., Apr. 19, 1937.
Additional ills.: Crillon Lake, Alaska, Mar. 15, 1937; Lower Red Rock Lake, Montana, Oct. 25, 1937; Lake Tanganyika, Africa, Dec. 20, 1937.
Mountains: Austria's Mountain Lake Paradise of the Salzkammergut, 2 ills., Apr. 19, 1937.
Additional ills.: Picos de Europa, Spain, Oct. 18, 1937; Dolomites, Italy, Oct. 18, 1937; Limestone formations, Kwangsi Province, China, Nov. 1, 1937; Rio de Janeiro, Brazil, Nov. 29, 1937; Andes, Peru, Feb. 7, 1938.
Oceans: The Humboldt Current: A "River" in the Ocean, 1 map, Apr. 26, 1937.
Drowned Canyons Are Explorers' New Happy Hunting Ground, 1 map, Oct. 25, 1937.
Rivers: Ohio River System Drains Area Almost as Large as Texas, 2 ills., Feb. 15, 1937.
Fitting a Strait-Jacket to the Father of Waters, 2 ills., 1 map, Feb. 22, 1937.
Floods Call for Special Dictionary, 2 ills., Feb. 22, 1937.
The Whangpoo River as Shanghai's Battlefront and Lifeline, Oct. 4, 1937.
The Yangtze Again a River of Destiny, Jan. 3, 1938.
Additional ills.: Connecticut River, Apr. 19, 1937; The Congo, Africa, Apr. 26, 1937; Pearl River at Canton, China, Oct. 18, 1937; Rio Negro, Brazil, Nov. 8, 1937; Yangtze, China, Dec. 6, 1937; Rio Negro, Nicaragua, Dec. 13, 1937; Dambovita River, Romania, Jan. 3, 1938; Komati River, Union of South Africa, Jan. 17, 1938.
Seas: The Mediterranean, Sea of Commerce and Destiny, Oct. 11, 1937.
Additional ill.: Mediterranean, French Riviera, Mar. 1, 1937.
Swamps: Ills.: Papyrus swamp, Uganda, Mar. 15, 1937; Rio Negro, Nicaragua, Dec. 13, 1937.
Volcanoes: Belgium Keeps an Eye on the Belgian Congo, Apr. 26, 1937.
Weather: Topsy-Turvy Weather Reverses Winter, Spring, Apr. 19, 1937.
The Humboldt Current: A "River" in the Ocean, 1 map, Apr. 26, 1937.

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MACHU PICCHU, LOST CITADEL OF THE INCAS, WAS REDISCOVERED BY A NATIONAL GEOGRAPHIC EXPEDITION

Blending with the rugged background of the Andes, Machu Picchu (right center) was only a legend to the outside world until Hiram Bingham, leader of a National Geographic Society-Yale University group, began to uncover its ruined buildings and terraced gardens in 1912. Its striking location, in the saddle of a ridge atop cliffs 1,000 feet high, rendered it safe from all enemies in the past (Bulletin No. 1).

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